

**Title 17  
FIRE CODE**

**UPDATED: October 20, 2014**

**Chapters:**

**17.02 GENERAL PROVISIONS**

**17.04 FIRE CODE**

**17.08 FIRE HYDRANTS AND WATER MAINS**

**17.02 GENERAL PROVISIONS**

**Sections:**

17.02.010 Relationship to comprehensive plan and growth management act.

**17.02.010 Relationship to comprehensive plan and growth management act.** This title is hereby enacted to be consisted with an implement the comprehensive plan in accordance with R.C.W. 36.70A. (Ord. 11625 § 1, 1994).

**17.04 FIRE CODE**

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**17.04.010 Adoption.** The International Fire Code 2012 Edition, as published by the International Code Council, as amended in chapter 51-54A WAC, effective July 1, 2013, together with amendments, additions, and deletions adopted in this chapter by reference, together with King County modifications are adopted as the Fire Code of King County, and referred to in this chapter as "this code." Administrative rules may be adopted in accordance with K.C.C. chapter 2.98 to further clarify and implement these code requirements. The King County modifications shall be codified in this chapter. (Ord. 17837 § 72, 2014: Ord. 15803 § 1, 2007: 14915 § 1, 2004: Ord. 14111 § 176, 2001: Ord. 12560 § 143, 1996: Ord. 12196 § 7, 1996: Ord. 11700 § 12, 1995: Ord. 11017 § 8, 1993: Ord. 11016 § 24, 1993: Ord. 10608 § 2, 1992: Ord. 8184 § 4, 1987: Ord. 6328 § 3, 1983: Ord. 5484 § 1, 1981: Ord. 3660 § 1, 1978: Ord. 2097 § 1, 1974).

**17.04.020 Term changes.** Whenever the following words appear in this code, they are to be changed as follows:

- A. "Department" to "department of permitting and environmental review."
- B. "Fire chief", "chief of the fire department," "fire prevention engineer" and "fire code official" to "King County fire marshal".
- C. "Fire department" to "department of permitting and environmental review." (Ord. 17837 § 73, 2014: Ord. 17420 § 70, 2012: Ord. 15319 § 3, 2005: Ord. 14915 § 2, 2004: Ord. 12560 § 144, 1996: Ord. 2097 § 2, 1974).

**17.04.200 General authority and responsibilities - General.** Section 104.1 of the International Fire Code is not adopted and the following is substituted:

**General (IFC 104.1).** The Fire Marshal is authorized to render interpretations of this code and make and enforce such rules and regulations, pursuant to the provisions of K.C.C. chapter 2.98, for the prevention and control of fires and fire hazards as necessary to carry out the application and the intent of this code, including but not limited to:

- 1. Procedures to assure that building permits for structures shall conform to the requirements of this code.

2. Procedures to assure that applicable standards of this code shall be reviewed as part of the subdivision, short subdivision, urban planned development, rezone, conditional use, special use, site development permit, binding site plan and building permit processes.

3. Procedures to assure that the standard known as NFPA 13R shall be applied as a minimum standard to all R occupancies.

4. Procedures to allow for relaxation of the hydrant spacing requirements by as much as 50% pursuant to K.C.C. chapter 17.08, except when such allowances would unreasonably reduce fire protection to the area or structures served.

5. A minimum of one certified copy or the number required by governing law of such rules and regulations shall be filed with the clerk of the council and shall be in effect immediately thereafter and additional copies shall be kept in the King County Fire Marshal's Office for distribution to the public. (Ord. 14915 § 4, 2004: Ord. 14111 § 177, 2001: Ord. 12560 § 148, 1996. Formerly K.C.C. 17.04.01001).

#### **17.04.210 General authority and responsibilities - General - Enforcement.**

Section 104.1 of the International Fire Code is supplemented with the following:

##### **Enforcement (IFC 104.1.1).**

1. The fire marshal or the fire marshal's authorized designee is authorized to enforce the provisions of this chapter, the ordinances codified in it, and any adopted rules and regulations in accordance with the enforcement and penalty provisions of K.C.C. Title 23.

2. The fire marshal, or his authorized designee, any officer of the department of public safety, and the chief of the fire district, or his authorized designee, is authorized to take such lawful action, including the writing and issuance of citations for civil infractions, as may be required to enforce the provisions of the fire lane ordinance codified in this title. (Ord. 14915 § 6, 2004: Ord. 14111 § 235, 2001: Ord. 11783 § 2, 1995: Ord. 7980 § 2, 1987: Ord. 2910 § 6, 1976: Ord. 2097 (part), 1974. Formerly K.C.C. 17.04.080).

**17.04.220 General authority and responsibilities - General - Additional conditions.** Section 104.1 of the International Fire code is supplemented with the following:

**Additional conditions (IFC 104.1.2).** The Fire Marshal or his/her designee retains the authority to impose additional conditions, including but not limited to increased setbacks, use of fire retardant materials, installation of fire sprinkler systems, automatic fire suppression systems, automatic fire detection systems or standpipes where determined necessary to mitigate identified fire protection impacts. (Ord. 14915 § 8, 2004: Ord. 14111 § 182, 2001: Ord. 12560 § 153, 1996. Formerly K.C.C. 17.04.01006).

**17.04.230 General authority and responsibilities - General - Duties of the fire marshal and fire districts.** Section 104.1 of the International Fire Code is supplemented with the following:

##### **Duties of the fire marshal and fire districts (IFC 104.1.3).**

1. The fire marshal shall have responsibility for administration and inspection functions to promote compliance of the fire prevention provisions of this code.

2. The Chiefs of the King County Fire Districts and Fire Departments shall have responsibility for fire suppression or extinguishing provisions of this code within their respective jurisdictions.

3. The fire marshal may, by written contract, delegate to the chiefs of the fire districts or fire departments authority for inspections of the fire prevention provisions of this code within their respective jurisdictions.

4. The fire marshal may, at the request of a fire districts or fire department, assume an advisory status in matters of operations, function, expenditure, tactics, personnel and equipment or any other function performed by the fire district or fire department. (Ord. 17837 § 74, 2014: Ord. 17420 § 71, 2012: Ord. 15319 § 4, 2005: Ord. 14915 § 10, 2004: Ord. 14111 § 183, 2001: Ord. 12560 § 154, 1996. Formerly K.C.C. 17.04.01007).

**17.04.240 General authority and responsibilities - Right of entry.** Section 104.3 of the International Fire Code is not adopted and the following is substituted:

**Right of entry (IFC 104.3).** The right of entry shall be in accordance with the procedures specified in K.C.C. Title 23. (Ord. 14915 § 12, 2004: Ord. 14111 § 184, 2001: Ord. 12560 § 155, 1996. Formerly K.C.C. 17.04.01008).

**17.04.250 General authority and responsibilities - Right of entry - Warrant.** Section 104.3.1 of the International Fire Code is not adopted. (Ord. 14915 § 13, 2004).

**17.04.260 General authority and responsibilities - Notices and orders.** Section 104.5 of the International Fire Code is not adopted and the following is substituted:

**Notices and orders (IFC 104.5).** Orders and notices authorized or required by this code shall be given or served in accordance with K.C.C. Title 23. (Ord. 14915 § 15, 2004: Ord. 14111 § 186, 2001: Ord. 12560 § 157, 1996. Formerly K.C.C. 17.04.01010).

**17.04.270 General authority and responsibilities - Modifications - Deviations.** Section 104.8 of the International Fire Code is supplemented with the following:

**Deviations (IFC 104.8.1).** The fire marshal or his/her designee shall have the authority to consider deviations from the standards established for life safety/rescue access, fire detection systems and fire sprinkler systems.

1. If the fire marshal finds that the deviation would not unreasonably reduce fire protection to the area or structures served, and determines that the deviation should be approved, the fire marshal shall notify the fire chief of the applicable fire district of the deviation request. The fire marshal may approve the deviation if the fire chief of the applicable fire district either concurs in writing with the fire marshal or does not respond in writing within seven working days after notification of the deviation request. The fire district chief's lack of response shall be taken as an indication that the fire chief concurs with the fire marshal's finding.

2. If a response is received within seven days which is not in accordance with the opinion of the director of the department of permitting and environmental review or his/her designee, the issue shall be submitted to the King County fire code appeals board. (Ord. 17420 § 72, 2012: Ord. 14915 § 17, 2004: Ord. 14111 § 180, 2001: Ord. 12560 § 151, 1996. Formerly K.C.C. 17.04.01004).

**17.04.280 General authority and responsibilities - Notice to fire districts.** Section 104 of the International Fire Code is supplemented with the following:

**Notice to fire districts (IFC 104.12).**

A. Prior to submitting an application for a commercial building permit, site development permit, binding site plan, a preliminary subdivision or short subdivision approval, final subdivision or short subdivision, urban planned development, zoning reclassification, conditional use and special use permits to the department:

1. the applicant shall submit a copy of his application to the fire district providing fire protection services to the proposed development;
2. subdivisions and short subdivisions applied for and/or recorded before February 1, 1989, shall be submitted once to the applicable fire district for review at the time of the first building permit by the applicant for that building permit;
3. it shall be the responsibility of the fire district to issue a receipt to the applicant the same day it receives a copy of a permit application. The receipt shall constitute proof to the director of the notification;
4. the applicant shall include the fire district receipt with the permit application to the department;
5. it shall be the responsibility of the fire district to notify the fire marshal of any comments within seven days of the receipt of an applied for permit. (Ord. 14915 § 19, 2004: Ord. 14111 § 178, 2001: Ord. 12560 § 149, 1996. Formerly K.C.C. 17.04.01002).

**17.04.290 Permits - Compliance with code - Penalties.** Section 105.3.6 of the International Fire Code is supplemented with the following:

**Penalties (IFC 105.3.6.1).** When installation of a fire protection system, which requires approval of the Fire Marshal, is started or proceeded with prior to obtaining said approval, the ordinary fees specified in K.C.C. Title 27 shall be doubled. The payment of such double fee shall not relieve any persons from fully complying with the requirement of this code in the execution of the work nor from any other penalties prescribed herein. (Ord. 14915 § 21, 2004: Ord. 14111 § 185, 2001: Ord. 12560 § 156, 1996. Formerly K.C.C. 17.04.01009).

**17.04.295 Solar photovoltaic power systems.**

Section 105.7 of the International Fire Code is supplemented with the following:

**Solar photovoltaic power systems (IFC 105.7.13).** A construction permit is required to install or modify solar photovoltaic power systems.

**Exception:** Roof-mounted photo-voltaic solar panels on one and two family dwellings that have a total dead load not exceeding three pounds per square foot and are mounted no more than eighteen inches above the roof or highest roof point on which they are mounted. (Ord. 17837 § 75, 2014).

**17.04.300 Board of appeals - Board of appeals established.** Section 108.1 of the International Fire Code is not adopted and the following is substituted:

**Appeals (IFC 108.1).** To determine and decide the suitability of alternate materials and methods of construction and to provide reasonable interpretations of the provisions of the code there shall be and hereby is created a fire code board of appeals. The board shall consist of five members who are qualified by experience and training to pass judgment upon pertinent matters. The Fire Marshal shall be an ex officio member and he/she or a designated appointee shall act as secretary of the board. The fire code appeals board shall be appointed by the executive, confirmed by the council, and shall serve for not more than two four-year terms or until their successor is appointed and qualified. The board shall adopt reasonable rules and regulations for conducting its investigations and shall render decisions and findings in writing to the Local Fire District Chief, with a duplicate copy to the appellant, which shall

be advisory unless otherwise specified in this code. The board may also recommend to the council new legislation regarding the subject matter of this code. (Ord. 14915 § 23, 2004: Ord. 14111 § 179, 2001: Ord. 12560 § 150, 1996. Formerly K.C.C. 17.04.01003).

**17.04.310 Board of appeals - Qualifications.** Section 108.3 of the International Fire Code is not adopted. (Ord. 14915 § 25, 2004).

**17.04.320 Stop work order - Order.** Section 111.1 of the International Fire Code is not adopted and the following is substituted:

**Order (IFC 111.1).** Whenever any work is being done contrary to the provisions of this code, the fire marshal may order the work stopped in accordance with K.C.C. Title 23 by notice in writing served on any persons engaged in the doing or causing such work to be done, or by posting such notice in a conspicuous place on the premises where the violation is occurring, and any such persons shall forthwith stop such work until authorized by the fire marshal to proceed with the work.

Whenever any work is being done contrary to the provisions of this code, the fire marshal may order the violations corrected without ordering all work stopped by issuing a correction notice which identifies the violation. The correction notice may require reinspection prior to further constructions or at the time of the next required inspection. The correction notice shall be served or posted in the same manner as a stop work order.

These remedies are in addition to those authorized elsewhere in the code. (Ord. 14915 § 26, 2004).

**17.04.330 Stop work order - Failure to comply.** Section 111.4 of the International Fire Code is not adopted. (Ord. 14915 § 27, 2004).

**17.04.340 Definitions - Applicant.** Section 202 of the International Fire Code is supplemented with the following:

**Definitions - Applicant (IFC 202).** "Applicant" means a property owner or a public agency or public or private utility which owns a right-of-way or associated easement or has been adjudicated the right to such an easement pursuant to RCW 8.12.090, or any person or entity designated or named in writing by the property or easement owner to be the applicant, in an application for a permit. (Ord. 14915 § 30, 2004: 14111 § 188, 2001: 12560 § 158, 1996. Formerly K.C.C. 17.04.01011).

**17.04.350 Definitions - Fire detection system.** Section 202 of the International Fire Code is supplemented with the following:

**Definitions - Fire detection system (IFC 202).** "Fire detection system" means a heat and/or smoke detection system monitored by a central and/or remote station conforming to the current edition of the International Fire Code as adopted by the Washington State Building Code Council and/or the Fire Marshal or his/her designee. (Ord. 15803 § 2, 2007: Ord. 14915 § 32, 2004: Ord. 14111 § 189, 2001: Ord. 12560 § 159, 1996. Formerly K.C.C. 17.04.01012).

**17.04.360 Definitions - Life safety/rescue access.** Section 202 of the International Fire Code is supplemented with the following:

**Definitions - Life safety/rescue access (IFC 202).** "Life safety/rescue access" means an unobstructed access to all floor levels and each roof level of a building on not less than twenty percent of the building perimeter by utilizing a thirty-five foot ladder. An alternate method would be at least one stairway enclosure with exit

doorways from each floor level and with a door opening onto each roof level which conforms to the requirements of the International Building Code. (Ord. 14915 § 36, 2004: Ord. 14111 § 192, 2001: Ord. 12560 § 162, 1996. Formerly K.C.C. 17.04.01015).

**17.04.370 Fire apparatus access roads - (IFC 503).** Section 503 of the International Fire Code as amended and supplemented by this chapter is hereby adopted as King County fire access standards. (Ord. 14915 § 39, 2004: Ord. 14111 § 194, 2001: Ord. 12560 § 164, 1996. Formerly K.C.C. 17.04.01017).

**17.04.380 Fire apparatus access roads - Specifications - Surface.** Section 503.2.3 of the International Fire Code is not adopted and the following is substituted:

**Surface (IFC 503.2.3).** Fire apparatus access roads shall be designed and maintained to support the imposed loads of 25 tons, or as required by Fire Marshal and shall be provided with a surface so as to provide all-weather driving capabilities that comply with K.C.C. chapter 14.42, King County Road Standards. (Ord. 15803 § 3, 2007: Ord. 14915 § 41, 2004: Ord. 14111 § 195, 2001: Ord. 12560 § 165, 1996. Formerly K.C.C. 17.04.01018).

**17.04.390 Fire apparatus access roads - Specifications - Turning radius.** Section 503.2.4 of the International Fire Code is not adopted and the following is substituted:

**Turning radius (IFC 503.2.4).** The turning radius of a fire apparatus access road shall have a 20 foot inside and 40 foot outside turning radius, or shall be otherwise approved by the Fire Marshal. (Ord. 14915 § 43, 2004: Ord. 14111 § 196, 2001: Ord. 12560 § 166, 1996. Formerly K.C.C. 17.04.01019).

**17.04.400 Fire apparatus access roads - Specifications - Dead ends.** Section 503.2.5 of the International Fire Code is not adopted and the following is substituted:

**Dead ends (IFC 503.2.5).** Dead-end fire apparatus access roads in excess of 150 feet (45.72 m) in length shall be provided with an approved cul-de-sac having a 40 foot turning radius, or a "hammerhead-like" turnaround designed as described in King County Administrative Rule for Chapter 17-04 or other designs approved by the Fire Marshal. (Ord. 14915 § 45, 2004: Ord. 14111 § 197, 2001: Ord. 12560 § 167, 1996. Formerly K.C.C. 17.04.01020).

**17.04.410 Fire apparatus access roads - Specifications - Grade.** Section 503.2.7 of the International Fire Code is not adopted and the following is substituted:

**Grade (IFC 503.2.7).** The gradient for a fire apparatus access road shall not exceed 15 percent at any point. (Ord. 14915 § 48, 2004: Ord. 14111 § 199, 2001: Ord. 12560 § 168, 1996. Formerly K.C.C. 17.04.01021).

**17.04.420 Fire apparatus access roads - Marking of establishment of fire lanes.** Section 503.3 of the International Fire Code is not adopted and the following is substituted:

**Marking of and establishment of fire lanes (IFC 503.3).**

A. Establishment of Fire Lanes. Fire lanes in conformance with this code shall be established by the King County fire marshal or his authorized designee, and shall be referred to as designated fire lanes in this section.

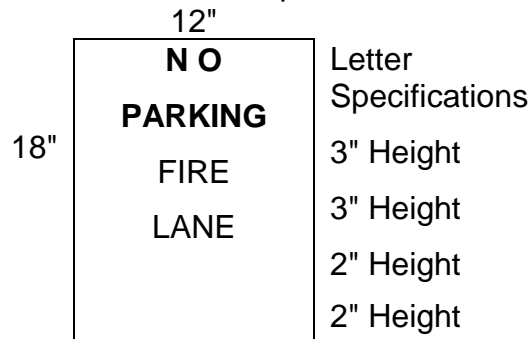
B. Definition of Fire Lanes. The area within any public right-of-way, easement, or on private property designated for the purpose of permitting fire trucks and other fire fighting or emergency equipment to use, travel upon, and park.

C. Marking of Fire Lanes. All designated fire lanes shall be clearly marked in the following manner:

1. Vertical curbs (6 inch) shall be painted yellow on the top and side, extending the length of the designated fire lane. The pavement adjacent to the painted curbs shall be marked with minimum 18 inch in height block lettering with a minimum 3 inch brush stroke reading: "NO PARKING - FIRE LANE." Lettering shall be yellow and spaced at 50 foot or portion thereof intervals, or

2. Rolled curbs or surface without curbs shall have a yellow 6 inch wide stripe painted extending the length of the designated fire lane. The surface adjacent to the stripe shall be marked with minimum 18 inch in height block lettering with a minimum 3 inch brush stroke reading: "NO PARKING - FIRE LANE." Lettering shall be in yellow and spaced at 50 ft. or portion thereof intervals, or

3. Fire lane signs shall be installed per the illustration:



a. Reflective in nature.  
b. Red letters on white background.  
c. Signs to be spaced 50 feet or portion thereof apart and posted on or immediately next to the curb.

d. Top of signs to be not less than 4 feet nor more than 6 feet from the ground.

e. Signs may be placed on a building when approved by the fire marshal as the designee of the manager of the department of permitting and environmental review.

When posts are required they shall be a minimum of 2 inch galvanized steel or 4 inch x 4 inch pressure treated wood. Signs to be placed so they face the direction of the vehicular travel.

D. Obstruction of Fire Lanes Prohibited. The obstruction of a designated fire lane by a parked vehicle or any other object is prohibited, shall constitute a traffic hazard as defined in state law and an immediate hazard to life and property.

E. Alternate Materials and Methods. The fire marshal as designee of the manager of the department of permitting and environmental review may modify any of the provisions herein where practical difficulties exist. The particulars of a modification shall be granted by the fire marshal and shall be entered into the records of the office.

F. Existing fire lane signs and markings.

1. Signs (minimum 9 inch by 16 inch) may be allowed to remain until there is a need for replacement and at that time a 12 inch x 18 inch sign shall be installed.

2. Markings may be allowed to remain until there is a need for repainting and at that time the provisions outlined in Section C, 1, 2 or 3 shall be complied with.

G. Maintenance. Fire lane markings shall be maintained at the expense of the property owner(s) as often as needed to clearly identify the designated area as being a fire lane.



H. Towing notification. At each entrance to property where fire lanes have been designated, signs shall be posted in a clearly conspicuous location and shall clearly state that vehicles parked in fire lanes may be impounded, and the name, telephone number, and address of the towing firm where the vehicle may be redeemed.

I. Property owner responsible. The owner, manager, or person in charge of any property upon which designated fire lanes have been established shall prevent the parking of vehicles or placement of other obstructions in such fire lanes.

J. Violation - Civil infraction. Any person who fails to mark or maintain the marking of a designated fire lane as prescribed in this chapter, or who parks a vehicle in, allows the parking of a vehicle in, obstructs, or allows the obstruction of a designated fire lane commits a civil infraction to which the provisions of RCW 7.80 shall apply. The penalty for failing to mark or maintain the marking of a designated fire lane shall be one hundred and fifty dollars. The penalty for parking a vehicle in, allowing the parking of a vehicle in, obstructing, or allowing the obstruction of a designated fire lane shall be fifty dollars.

K. Violation - Civil Penalty. In addition to, or as an alternate to, the provisions of subsection E, any person who fails to meet the provisions of the fire lane requirements codified in this title shall be subject to civil penalties in conformance with K.C.C. Chapter 23.

L. Impoundment. Any vehicle or object obstructing a designated fire lane is hereby declared a traffic hazard and may be abated without prior notification to its owner by impoundment pursuant to the applicable state law. (Ord. 17420 § 73, 2012: Ord. 14915 § 51, 2004: Ord. 11783 § 1, 1995: Ord. 8868, 1989: Ord. 7980 § 1, 1987. Formerly K.C.C. 17.04.070).

#### **17.04.430 Access to building openings and roofs - Required access.**

Section 504.1, of the International Fire Code is not adopted and the following is substituted:

**Required access (IFC 504.1).** Exterior doors and openings required by this code or the Building Code shall be maintained readily accessible for emergency access by the fire department.

An approved access walkway leading from fire apparatus access roads to exterior openings required by this code or the Building Code shall be provided when required by the chief.

All rescue windows required for Group R Occupancies, except for detached one and two family dwellings, shall be accessible by a 35 foot ground extension ladder placed so that the inclination of such ladder does not exceed 70 degrees. Ladders shall be located within the property lines. (Ord. 15803 § 4, 2007: Ord. 14915 § 53, 2004: Ord. 14111 § 201, 2001. Formerly K.C.C. 17.04.010223).

#### **17.04.440 Access to building openings and roofs - Stairway access.**

Section 504.3 of the International Fire Code is not adopted and the following is substituted:

##### **Stairway access (IFC 504.3).**

1. All occupancies shall be required to provide approved stairway access except for the following:

1.1. Group U occupancies.

1.2. Structures regulated by the International Residential Code for One- and Two-Family Dwellings.

1.3. Roof access need not be provided to roof levels having slope greater than 4 in 12.

2. The provisions of this chapter shall apply to all buildings whose county assessed value has increased by more than 50% within a five year period due to the added value of alterations and repairs. When the first permit application is submitted to add to, alter or repair an existing building, the county assessed value of the building at the time the complete application is submitted shall be considered the base county assessed value for the following five year period.

**EXCEPTION:** Structures damaged as a result of a disaster declared in accordance with K.C.C. chapter 12.52, shall comply with K.C.C. 17.04.610 and 17.04.620.

3. Any additions to an existing structure shall be considered new construction and subject the entire structure to the provisions of this section. (Ord. 14915 § 55, 2004: Ord. 14238 § 26, 2001: Ord. 14111 § 204, 2001: Ord. 12560 § 170, 1996. Formerly K.C.C. 17.04.01023).

**17.04.450 Premises identification – Addresses.** Section 505.1 of the International Fire Code is not adopted and the following is substituted:

**Premises identification – Addresses (IFC 505.1).** Approved numbers or addresses shall be provided for all new buildings in such a position as to be plainly visible and legible from the street or road fronting the property in accordance with K.C.C. chapter 16.08. (Ord. 14915 § 56, 2004).

**17.04.460 Key boxes - Where required.** Section 506.1 of the International Fire Code is not adopted and the following is substituted:

**Where required (IFC 506.1).** When access to or within a structure or an area is difficult or restricted because of secured openings or where immediate access is necessary for life-saving or firefighting purposes, the chief responsible for fire suppression service is authorized to require a key box to be installed in an accessible location. The key box shall be of an approved type and shall contain keys to gain necessary access as required by the chief. (Ord. 14915 § 58, 2004: Ord. 14111 § 202, 2001. Formerly K.C.C. 17.04.010225).

**17.04.470 Fire protection water supplies - Fire hydrant systems.** Section 507.5 of the International Fire Code is not adopted and the following is substituted:

**Fire hydrant systems (IFC 507.5).** Fire hydrant systems shall be in accordance with the procedures specified in King County water-main and fire hydrant provisions, K.C.C. chapter 17.08. (Ord. 17837 § 76, 2014: Ord. 14915 § 59, 2004: Ord. 14111 § 203, 2001. Formerly K.C.C. 17.04.010227).

**17.04.480 General - Construction documents.** Section 901.2 of the International Fire Code is not adopted and the following is substituted:

**Construction documents (IFC 901.2).** Complete plans and specifications for fire alarm systems; water-mains supplying required fire flow, fire-extinguishing systems, including automatic sprinklers and wet dry standpipes; halon or clean agent systems and other special types of automatic fire-extinguishing systems; basement pipe inlets; and other fire-protection systems and appurtenances thereto shall be submitted to the fire marshal for review and approval prior to system installation. Plans and specifications for fire alarm systems shall include, but not be limited to, a floor plan; location of all alarm-initiating and alarm-signaling devices; alarm control- and trouble-signaling equipment; annunciation; power connection; battery calculations; conductor type and sizes; voltage drop calculations; and manufacturer, model numbers and listing

information for all equipment, devices and materials. (Ord. 15319 § 5, 2005: Ord. 14915 § 62, 2004: Ord. 14111 § 205, 2001. Formerly K.C.C. 17.04.010231).

**17.04.490 General - Modifications.** Section 901.4 of the International Fire Code is supplemented with the following:

**Modifications (IFC 901.4.7).** When changes, alterations or additions to an existing sprinkler system are made that involve 10 or less sprinkler heads, a permit is not required if a final inspection and/or acceptance test is witnessed by, and as-built plans are submitted to the Fire Marshal. (Ord. 17837 § 77, 2014: Ord. 14915 § 64, 2004: Ord. 14111 § 213, 2001. Formerly K.C.C. 17.04.010239).

**17.04.500 General - Installation acceptance testing.** Section 901.5 of the International Fire Code is not adopted and the following is substituted:

**Installation acceptance testing (IFC 901.5).** Fire alarm systems; watermain supplying required fire flow, fire hydrant systems; fire-extinguishing systems, sprinkler systems, standpipes, and other fire-protection systems and appurtenances thereto shall meet the approval of the fire department as to installation and location and shall be subject to such acceptance tests as required by the fire code official.

Condition of acceptance of halon and clean agent systems shall be satisfactory passage of a test conducted in accordance with nationally recognized standards prior to final acceptance of the system.

Fire alarm and detection systems shall be tested in accordance with NFPA 72 and nationally recognized standards. (Ord. 14915 § 66, 2004: Ord. 14111 § 206, 2001. Formerly K.C.C. 17.04.010232).

**17.04.510 General - Marking of fire-protection equipment and fire hydrants.** Section 901 of the International Fire Code is supplemented with the following:

**Marking of fire-protection equipment and fire hydrants (IFC 901.11).** Fire-protection equipment and fire hydrants shall be clearly identified in an approved manner to prevent obstruction by parking and other obstructions.

1. All fire department connections shall have a sign complying with the International Fire Code or as approved by the Fire Marshal. The sign shall specify what type of water-based fire protection system it serves and building areas served.

2. All main control valves and sectional valves for water-based fire protection system shall have a sign specifying what the valves control.

3. All sprinklers and standpipe risers shall have signs indicating the type of water-based fire protection system it is. (Ord. 17837 § 78, 2014: Ord. 15803 § 5, 2007: Ord. 14915 § 71, 2004: Ord. 14111 § 210, 2001. Formerly K.C.C. 17.04.010236).

**17.04.520 Automatic sprinkler systems - General.** Section 903.1 of the International Fire Code is not adopted and the following is substituted:

**General (IFC 903.1).**

1. An automatic fire-extinguishing system shall be installed in the occupancies and locations as set forth in Section 903.2.

For provisions on special hazards and hazardous materials, see Section 901.4.3.

2. The provisions of this section shall apply to all buildings whose county assessed value has increased by more than 50% within a five year period due to the added value of alterations and repairs. When the first permit application is submitted to add to, alter or repair an existing building, the county assessed value of the building at the time the complete application is submitted shall be considered the base county assessed value for the following five year period.

**EXCEPTION:** Structures damaged as a result of a disaster declared in accordance with K.C.C. chapter 12.52, shall comply with K.C.C. 17.04.610 and 17.04.620.

3. Any additions to an existing structure shall be considered new construction and subject the entire structure to the provisions of this section.

**EXCEPTIONS:** A one time exemption for buildings regulated by the International Residential Code One- and Two-Family Dwellings will be allowed for a single addition not to exceed 500 square feet, unless sprinklers or other fire protection systems are required by other statutes.

4. All condominiums shall have the following wording in the recorded Declaration of Covenants and a copy of the document shall be provided to the fire code official or his/her designee:

4.1. In the event that any unit should be equipped with a sprinkler system, nothing shall be hung from the sprinklers comprising a part of the system nor shall any such sprinklers be painted, covered, or otherwise changed, tampered with or altered.

4.2. Prior to any alteration, amendment, modification or change thereof, the owners or their agents will submit such alteration, amendment, modification or change to the King County Fire Marshal or his or her designee for approval and agrees to comply with all applicable sprinkler requirements. (Ord. 14915 § 74, 2004: Ord. 14238 § 27, 2001: Ord. 14111 § 214, 2001: Ord. 12560 § 171, 1996. Formerly K.C.C. 17.04.01024).

**17.04.522 Automatic sprinkler systems – Group E.** Section 903.2.3 of the International Fire Code is not adopted and the following is substituted:

**Automatic sprinkler systems – Group E (IFC 903.2.3).** An automatic sprinkler system shall be provided for Group E occupancies.

**Exceptions:**

1. Portable school classrooms, provided the aggregate area of any cluster or portion of a cluster of portable school classrooms does not exceed 5,000 square feet (1465m<sup>2</sup>) and clusters of portable school classrooms shall be separated as required in Chapter 5 of the building code.

2. Group E Occupancies with an occupant load of 50 or less, not including daycare facilities that provide care for more than 12 children 2 1/2 years of age or less. (Ord. 17837 § 79, 2014: Ord. 15803 § 6, 2007).

**17.04.530 Automatic sprinkler systems - Where required - Senior citizen apartments.** Section 903.2.8 of the International Fire Code is supplemented with the following:

**Senior citizen apartments (IFC 903.2.8).** All senior citizen apartments defined as, a room or a suite of two or more rooms in a duplex or multi-family structure for which occupancy of the structure has been limited to persons age sixty-two or older by covenant or deed restriction in which King County is granted enforcement authority, which are four stories or more in height shall be protected throughout by an approved automatic sprinkler system. (Ord. 17837 § 80, 2014: Ord. 14915 § 76, 2004: Ord. 14111 § 233, 2001: Ord. 12560 § 145, 1996: Ord. 6328 § 4, 1983. Formerly K.C.C. 17.04.030).

**17.04.540 Automatic sprinkler systems - Where required.** Section 903.2 of the International Fire Code is not adopted and the following is substituted:

**Where required (IFC 903.2).** Sprinklers are required as follows:

1. For residential units and their accessory structures built under the International Residential Code, sprinklers shall be installed as set forth in Section 903.2.13.

2. For all other occupancies an automatic sprinkler system shall be installed in the locations set forth in Section 903.2.1 through Section 903.2.12.

**EXCEPTION:** Spaces or areas in telecommunications buildings used exclusively for telecommunications equipment, associated electrical power distribution equipment, batteries and standby engines, provided those spaces or areas are equipped throughout with an automatic smoke detection system in accordance with Section 907.2 and are separated from the remainder of the building by not less than 1-hour fire barriers constructed in accordance with Section 707 or not less than 2-hour horizontal assemblies constructed in accordance with Section 711, or both.

3. Sprinklers are required in all occupancies requiring 2,000 gallons per minute or more fire flow, or where the total floor area included within the surrounding exterior walls on all floor levels including basements exceeds 10,000 square feet. (Ord. 17837 § 81, 2014; Ord. 14915 § 78, 2004; Ord. 14111 § 215, 2001. Formerly K.C.C. 17.04.010245).

**17.04.550 Automatic sprinkler systems – Where required – Buildings more than fifty-five feet in height.** Section 903.2.11.3 of the International Fire Code is not adopted and the following is substituted:

**Buildings more than fifty-five feet in height (IFC 903.2.11.3).** An automatic sprinkler system shall be installed throughout all buildings used for human occupancy that are located 55 feet (16.76 m) or more above the lowest level of fire department vehicle access.

**EXCEPTIONS:**

1. Airport control towers.
2. Open parking structures. (Ord. 17837 § 83, 2014; Ord. 14915 § 79, 2004).

**17.04.560 Automatic sprinkler systems - Where required - Residential units and accessory structures built under the IRC.** Section 903.2.11 of the International Fire Code is supplemented with the following:

**Residential units and accessory structures built under the IRC (IFC 903.2.11.7).** An automatic sprinkler system shall be installed in structures built under the International Residential Code (IRC) as follows:

1. The gross floor area exceeds 2,500 square (including attached garages) without adequate fire flow except as cited in K.C.C. 17.08.030;
2. There is no approved fire department access as defined in the King County road standards and IFC 503, as amended; or
3. If 2,000 gallons per minute or more fire flow is required or where the total floor area included within the surrounding exterior walls on all floor levels including basements exceeds 10,000 square feet. For townhouses, each unit is considered a separate building.

**EXCEPTIONS:** Attached decks, exterior porches and carports open on two sides.

4. Where special hazards or unusual conditions exists in addition to the normal hazard of the space due to the design, size, volume or use of the space, the Fire Marshal is authorized to require additional safeguards suitable for the protection of the hazard or condition involved. Additional safeguards can consist of automatic fire alarm system, automatic sprinkler or water spray system, standpipe and hose, fixed or portable fire extinguishers, or other special fire-extinguishing systems. Where such

systems are provided, they shall be designed and installed in accordance with the International Fire Code. (Ord. 17837 § 84, 2014: Ord. 17837 § 84, 2014: Ord. 15802 § 7, 2007: Ord. 14915 § 83, 2004: Ord. 14111 § 218, 2001: Ord. 12560 § 174, 1996. Formerly K.C.C. 17.04.01027).

**17.04.565 Automatic sprinkler systems - Where required - IRC occupancies.**

Section 903.2 of the International Fire Code is supplemented with the following:

**IRC occupancies (IFC 903.2.13).** An automatic sprinkler system shall be installed in residential units and accessory structures built under the International Residential Code as follows:

1. The gross floor area exceeds 2,500 square feet (including attached garages) without adequate fire flow except as cited in K.C.C. 17.08.030;
2. There is no approved fire department access as defined in the road standards of K.C.C. Title 14; and
3. Either 2,000 gallons per minute or more fire flow is required or the total floor area included within the surrounding exterior walls on all floor levels, including basements, exceeds 10,000 square feet. For townhouses each unit is considered a separate building.

**EXCEPTIONS:** Attached decks, exterior porches and carports open on two sides; or

4. Where special hazards or unusual conditions exist in addition to the normal hazard of the space due to the design, size, volume or use of the space, the Fire Marshal is authorized to require additional safeguards suitable for the protection of the hazard or condition involved. Additional safeguards can consist of automatic fire alarm system, automatic sprinkler or water spray system, standpipe and hose, fixed or portable fire extinguishers, or other special fire-extinguishing systems. Where such systems are provided, they shall be designed and installed in accordance with the applicable International Fire Code Standards. (Ord. 17837 § 82, 2014).

**17.04.570 Alternative automatic fire-extinguishing systems - Where required - Cooking appliance hood system suppression.** Section 904.2 of the International Fire Code is supplemented with the following:

**Cooking appliance hood system suppression (IFC 904.2.2).** The automatic fire-extinguishing system used to protect ventilating hoods and ducts and cooking appliances shall be approved for the cooking medium utilized, tested to UL Standard 300 and installed to include cooking surfaces, deep fat fryers, griddles, upright broilers, charbroilers, range tops and grills. Protection shall also be provided for the enclosed plenum space within the hood above filters and exhaust ducts serving the hood.

All deep fat fryers shall be installed with at least a 16 inch (406.4 mm) space between the fryer and surface flames from adjacent cooking equipment or as approved by the Fire Marshal. (Ord. 14915 § 86, 2004: Ord. 14111 § 220, 2001. Formerly K.C.C. 17.04.010275).

**17.04.580 Fire alarm and detection systems - General.** Section 907.1 of the International Fire Code is not adopted and the following is substituted:

**General (IFC 907.1).**

1. All occupancies exceeding 3,000 square feet gross floor area shall be required to provide an approved monitored automatic fire detection system. Fire separation walls as noted in Section 705.1 of the International Building Code shall not be considered to separate a building to enable deletion of the required fire detection

system. The requirement of this section do not apply to Group U occupancies and residential units built under the IRC.

1.1. Occupancies protected throughout by an approved/monitored automatic sprinkler system may delete heat detectors from the system. Smoke detection type devices are not exempted in buildings with fire sprinkler systems.

2. The provisions of this section shall apply to all buildings whose county assessed value has increased by more than 50% within a five year period due to the added value of alterations and repairs. When the first permit application is submitted to add to, alter or repair an existing building, the county assessed value of the building at the time the complete application is submitted shall be considered the base county assessed value for the following five year period.

**EXCEPTION:** Structures damaged as a result of an emergency declared in accordance with K.C.C. chapter 12.52, shall comply with K.C.C. 17.04.610 and 17.04.620.

3. Any additions to an existing structure shall be considered new construction and subject the entire structure to the provisions of this section. (Ord. 14915 § 89, 2004: 14238 § 28, 2001: Ord. 14111 § 222, 2001: Ord. 12560 § 175, 1996. Formerly K.C.C. 17.04.01028).

**17.04.0583 Fire alarm and detection systems – Group E.** Section 907.2.3 of the International Fire Code not adopted and the following is substituted:

**Fire alarm and detection systems – Group E (IFC 907.2.3).** A manual fire alarm system shall be installed in Group E occupancies. When automatic sprinkler systems or smoke detectors are installed, such systems or detectors shall be connected to the building fire alarm system.

**EXCEPTIONS:**

1. Group E occupancies providing infant daycare for children 2 ½ years or less of age for 12 or fewer and all other Group E occupancies with an occupant load of less than 50.

2. Manual fire alarm boxes are not required in Group E occupancies where all of the following apply:

2.1. Interior corridors are protected by smoke detectors with alarm verification.

2.2. Auditoriums, cafeterias, gymnasiums and the like are protected by heat detectors or other approved detection devices.

2.3. Shops and laboratories involving dusts or vapors are protected by heat detectors or other approved detection devices.

2.4. Off-premises monitoring is provided.

2.5. The capability to activate the evacuation signal from a central point is provided.

2.6. In buildings where normally occupied spaces are provided with a two-way communication system between such spaces and a constantly attended receiving station from where a general evacuation alarm can be sounded, except in locations specifically designated by the fire code official.

3. Manual fire alarm boxes shall not be required in Group E occupancies where the building is equipped throughout with an approved automatic sprinkler system, the notification appliances will activate on sprinkler water flow and manual activation is provided from a normally occupied location. (Ord. 15803 § 8, 2007).

**17.04.590 Fire department connections - Location - Distance.** Section 912.2 of the International Fire Code is supplemented with the following:

**Distance (IFC 912.2.3).** Fire department pumper connections shall not be located on a building unless approved by the Fire Marshal, and shall be located within

50 feet of a required fire hydrant. (Ord. 14915 § 101, 2004: Ord. 14111 § 211, 2001. Formerly K.C.C. 17.04.010237).

**17.04.600 Disaster damage - purpose.** Section 3301 of the International Fire Code is supplemented with the following:

**Disaster damage - purpose (IFC 3301.3).** The purpose of K.C.C. 17.04.610 and 17.04.620 is to provide a defined level of repair for buildings and structures damaged as a result of a disaster has been declared accordance with K.C.C. chapter 12.52. K.C.C. 17.04.610 through 17.04.620 are not intended to modify requirements that would otherwise apply under the Washington state energy code, chapter 19.27A RCW or provisions in buildings for aged and handicapped persons, chapter 70.92 RCW. (Ord. 17837 § 85, 2014: Ord. 14915 § 103, 2004: Ord. 14238 § 29, 2001. Formerly K.C.C. 17.04.0815).

**17.04.610 Disaster damage - Rescue access and fire protection system requirements for structures damaged by disaster.** Section 3301 of the International Fire Code is supplemented with the following:

**Rescue access and fire protection system requirements for structures damaged by disaster (IFC 3301.3.1).** Structures damaged as a result of an emergency declared in accordance with K.C.C. chapter 12.52, that do not comply with K.C.C. 17.04.440 (Life safety/rescue access - Section 504.3), K.C.C. 17.04.520 (Fire extinguishing systems - Section 903.1) or K.C.C. 17.04.580 (Fire detection systems - Section 907.1), shall comply with current code based on the ratio of the estimated value of the repairs required to restore the structural members to the pre-event condition to the estimated replacement value of the structure as follow:

1. When the damage ratio is thirty percent or less, structures will not be required to be retrofitted to comply with K.C.C. 17.04.440 (Life safety/rescue access - Section 504.3), K.C.C. 17.04.520 (Fire extinguishing systems - Section 903.1) or K.C.C. 17.04.580 (Fire detection systems - Section 907.1).

2. When the damage ratio is greater than thirty percent but less than fifty percent, structures shall comply with K.C.C. 17.04.440 (Life safety/rescue access - Section 504.3), K.C.C. 17.04.520 (Fire extinguishing systems - Section 903.1) and K.C.C. 17.04.580 (Fire detection systems - Section 907.1), to the degree feasible. When full compliance with K.C.C. 17.04.520 (Fire extinguishing systems - Section 903.1) is found to not be feasible due to insufficient water availability, partial coverage may be required. Feasibility shall be determined by the fire marshal using the following factors:

- 2.1. Water availability;
- 2.2. Existing configuration off the structure;
- 2.3. Existing configuration of the site and access;
- 2.4. Whether repairs will extend the useful life of the structure;
- 2.5. Projected length of the economic life of the structure;
- 2.6. Existing or proposed area separation walls;
- 2.7. Extent of the proposed noncompliance;
- 2.8. Extent of repairs;
- 2.9. Use, occupant load, or fire load of the facility; and
- 2.10. Economic considerations.

3. When the damage ratio is fifty percent or greater, structures shall meet full compliance with K.C.C. 17.04.440 (Life safety/rescue access - Section 504.3), K.C.C. 17.04.520 (Fire extinguishing systems - Section 903.1) and K.C.C. 17.04.580 (Fire detection systems - Section 907.1). (Ord. 17837 § 86, 2014: Ord. 14915 § 105, 2004: Ord. 14238 § 30, 2001. Formerly K.C.C. 17.04.0816).



**17.04.620 Disaster damage - Repairing and replacing existing fire protection systems damaged by a disaster.** Section 3301 of the International Fire Code is supplemented with the following:

**Repairing and replacing existing fire protection systems damaged by a disaster (IFC 3301.3.2).** Existing fire extinguishing systems and fire detection systems damaged as a result of an emergency declared in accordance with K.C.C. chapter 12.52, shall comply as follows:

1. When damage to an existing fire extinguishing system or fire detection system requires repair, replacement or both, totaling less than or equal to ten percent of the system, it may be repaired or replaced to the code requirements in effect at the time the system was installed.

2. When the damage to an existing fire extinguishing system or fire detection system requires repair, replacement or both, totaling more than ten percent, but less than fifty percent of the system, the damaged portions of the system must be brought into compliance with the current code requirements.

3. When the damage to an existing fire extinguishing system or fire detection system requires repair, replacement or both totaling fifty percent or more of the system, the entire system must be brought into compliance with current code requirements. (Ord. 17837 § 87, 2014: Ord. 14915 § 108, 2004: Ord. 14238 § 31, 2001. Formerly K.C.C. 17.04.083).

**17.04.630 Outdoor storage of containers and portable tanks - Location on property.** Section 5704.4.2 of the International Fire Code is not adopted and the following is substituted:

**Location on property.** Outdoor storage of liquids in containers and portable tanks shall be in accordance with Table 5704.4.2. Storage of liquids near buildings located on the same property shall be in accordance with this section.

**EXCEPTION:** Outdoor storage of flammable liquids in excess of ten gallons is not permitted on property used for single family, duplex and townhouse dwellings. (Ord. 17837 § 88, 2014: Ord. 15802 § 9, 2007: 14915 § 114, 2004: Ord. 14111 § 234, 2001: Ord. 12560 § 146, 1996: Ord. 8726 § 1, 1988. Formerly K.C.C. 17.04.040).

## **17.08 FIRE HYDRANTS AND WATER MAINS**

### **Sections:**

- 17.08.010 Definitions.
- 17.08.020 Application.
- 17.08.030 Exemptions.
- 17.08.040 Water main requirements.
- 17.08.050 Fire hydrants - single family.
- 17.08.060 Fire hydrants - other uses.
- 17.08.070 Minimum water flow requirements.
- 17.08.080 Fire hydrants.
- 17.08.090 Variances.
- 17.08.100 Water authority responsibility.
- 17.08.110 Enforcement.
- 17.08.120 Severability.
- 17.08.130 Water purveyor authority.
- 17.08.140 Individual service connections.
- 17.08.150 Effective date.
- 17.08.160 Appeals.

### **17.08.010 Definitions.**

A. Unless otherwise provided in this section, the definitions in the International Fire Code, as adopted in K.C.C. 17.04.010, and in the rules and regulations of the state board of health regarding public water systems, chapter 346-290 WAC, shall apply to this chapter.

B. For the purposes of this chapter, "fire department" means the fire authority normally responsible for fire suppression in a specified area.

C. For the purposes of this chapter, "water flow" means the minimum quantity of water required for domestic use or fire fighting, whichever is higher, at a specified building, development or site, expressed in continuous gallons per minute at twenty pounds per square inch residual pressure for a designated duration of time.

D. For the purposes of this chapter, "fire marshal" means the King County fire marshal or his or her designated representative.

E. For the purposes of this chapter, "water main" means piping used to deliver water to any fire hydrants or to one or more individual service connections. (Ord. 15803 § 10, 2007: Ord. 14915 § 116, 2004: Ord. 5828 § 2, 1982).

#### **17.08.020 Application.**

A. Subdivisions and short subdivisions are required to be provided with water mains and fire hydrants, consistent with county standards and department of social and health services principles of water system design as a condition of final plat or short plat approval unless exempt pursuant to Section 17.08.030.

B. All structures or additions thereto erected pursuant to a building permit and/or mobile home permit shall be served by operational water mains and fire hydrants consistent with county standards prior to

1. the commencement or installation of combustible construction or
2. prior to construction of a second floor if the building is noncombustible, whichever occurs first, unless exempt pursuant to Section 17.08.030.

C. Mobile home parks and recreational vehicle parks shall be required to provide water mains and fire hydrants consistent with county standards as a condition of final site plan approval.

D. Permits or approvals for uses not involving a structure shall be served by water mains and fire hydrants consistent with county standards.

E. All new water mains and all additions and extensions to existing water mains shall meet the requirements of this chapter, provided that water mains which serve only uses exempt pursuant to Section 17.08.030 are also exempt from the requirements of this chapter.

F. All water purveyor comprehensive plans approved pursuant to K.C.C. Chapter 13.24 shall be consistent with the provisions of this chapter.

G. All water mains and fire hydrants shall be served by a water district or water purveyor in accordance with a current water comprehensive plan approved pursuant to K.C.C. Chapter 13.24, or by other adequate means providing service levels consistent with the provisions of this Chapter. (Ord. 5828 § 3, 1982).

#### **17.08.030 Exemptions.**

A. The following permits and approvals are exempt from the water flow and fire hydrant requirements of this chapter. These exemptions do not exempt any development from compliance with the requirements of state law.

1. Subdivisions and short subdivisions located outside an Urban Growth Area designated by the King County Comprehensive Plan and that do not contain a lot less than thirty-five thousand square feet in size.

2. Building permits for single family, duplex detached dwellings and mobile home permits for mobile homes not in mobile home parks, located outside an Urban Growth Area designated by the King County Comprehensive Plan, only if the lot is at least thirty-five thousand square feet in size.

3. Building permits for structures classified as Group U occupancies under the International Building Code that conform to the definition of agricultural buildings in Appendix C of the International Building Code only if the structures are located outside an Urban Growth Area designated by the King County Comprehensive Plan.

4. Building permits for structures that:

- a. do not exceed two-thousand-five hundred square feet in floor area (excluding garage);
- b. are served by a Group B water system; and
- c. are located outside an Urban Growth Area.

5. Building permits for structures that exceed the two-thousand-five hundred square feet limit provided for in subsection A.4.a. of this section, but comply with subsection A.4.b. and c. of this section, shall be exempt from this chapter if the fire marshal determines that the project will not create a substantial fire hazard.

B. The fire marshal shall have the authority to impose conditions including, but not limited to, increased setbacks, use of fire retardant materials or sprinkler system requirements on permits exempt under subsection A. of this section where necessary to mitigate identified fire hazards.

C. Building permits and mobile home permits and subdivisions and short subdivisions exempt under subsection A. of this section shall as a condition of approval, record a covenant running with the land which acknowledges the absence of fire hydrants and by which owners of the property and their successors are deemed to have agreed to participate in and not oppose or protest annexation to a public water district or the formation of a utility local improvement district for installation of water mains and fire hydrants consistent with applicable county standards. However, this condition shall not apply to any subdivision or short subdivision, or to any building permits and mobile home permits exempt under subsection A. of this section when the lot is five acres or larger, or the proposed subdivision, short subdivision or structure is located outside an Urban Growth Area designated by the King County comprehensive plan. (Ord. 14915 § 117, 2004: Ord. 12321 § 1, 1996: Ord. 11625 § 2, 1994: Ord. 6541, 1983: Ord. 5828 § 4, 1982).

#### **17.08.040 Water main requirements.**

A. All new required water mains subject to this chapter that serve fire hydrants shall be a minimum of eight inches inside diameter for dead end mains and six inches inside diameter for circulating mains. Hydrant leads less than fifty feet in length may be six inches in diameter.

B. All new required water mains subject to this chapter shall have fire hydrants installed to conform to the requirements of this chapter.

C. All new required water mains subject to this chapter shall meet applicable engineering and health standards adopted by the state of Washington or the water purveyor, including chapters 246-290 and 246-293 WAC. (Ord. 15803 § 11, 2007: Ord. 14915 § 118, 2004: Ord. 5828 § 5, 1982).

**17.08.050 Fire hydrants - single family.** Fire hydrants serving detached single family dwellings or duplex dwellings, excluding townhouses, on individual lots shall be located not more than seven hundred feet on center and shall be located so that no single family lot is more than three hundred fifty feet from a hydrant. The distances shall be measured on the path of vehicular access, unless a variance is obtained pursuant to Section 17.08.090A. (Ord. 14915 § 119, 2004: Ord. 5828 § 6, 1982).

#### **17.08.060 Fire hydrants - other uses.**

A. Fire hydrants serving any use, including townhouses, other than detached single family dwellings or duplex dwellings on individual lots shall be located not more than three hundred feet on center and shall be located so that at least one hydrant is located within one hundred fifty feet of all structures or uses. Such distances shall be measured on the path of vehicular access, unless a variance is obtained in accordance with K.C.C. 17.08.090A.

B. The department shall adopt rules and regulations specifying the number and location of fire hydrants for structures and uses which require more than one fire hydrant. (Ord. 14915 § 120, 2004: Ord. 5828 § 7, 1982).

#### **17.08.070 Minimum water flow requirements.**

A. The department shall adopt rules and regulations based upon the Guide for Determination of Required Fire Flow, 1974 Edition, published by the Insurance Service

Office, establishing criteria for determination of water flow requirements sufficient to provide reasonable fire protection.

B. In no event, shall the water flow required for any use be less than that required by chapters 246-290 and 246-293 WAC. (Ord. 15803 § 12, 2007: Ord. 14915 § 121, 2004: Ord. 5828 § 8, 1982).

**17.08.080 Fire hydrants.** The department shall adopt rules and regulations establishing standards for design and installation of fire hydrants as necessary to meet sound engineering practices and provide reasonable fire protection. (Ord. 14915 § 122, 2004: Ord. 5828 § 9, 1982).

**17.08.090 Variances.**

A. The fire marshal shall have the authority to approve deviations from the standards established under this chapter when it is shown that:

1. Strict compliance would require unreasonable fire hydrant locations, fire flow requirements or water main sizes; and
2. The variance would not unreasonably affect adequate fire protection to the area or structures served.

B. The fire marshal may approve variances, except as provided in subsection C. of this section for connections to single family residences served by existing water system that have fire hydrants and fire flow of at least five hundred gallons per minute if the variance would not unreasonably affect fire protection and only if the purveyor's approved comprehensive plan includes a method for increasing fire flow to current standards.

C. The fire marshal shall not approve any variance which would result in a violation of chapters 246-290 and 246-293 WAC without prior approval of the state Department of Social and Health Services. (Ord. 15803 § 13, 2007: Ord. 14915 § 123, 2004: Ord. 7080 § 1, 1985: Ord. 5828 § 10, 1982).

**17.08.100 Water authority responsibility.**

A. Water authorities shall not be required to exercise police or regulatory powers toward the enforcement of this chapter. The only role of water authorities shall be to provide information, such as:

1. The water authority may be requested by the county to indicate in writing its capability to provide water service, consistent with the standards contained in this chapter, to any building permit, subdivision, or short subdivision applicant, or to the county;
2. The water authority may be required by the fire marshal to notify the fire department in writing when a water system installed pursuant to this chapter is available for use.

B. Enforcement responsibility, for determining whether or not to approve a building permit, subdivision, or short subdivision application, based on information provided by the water authority, shall belong solely to King County. (Ord. 3316 § 4, 1977).

**17.08.110 Enforcement.** The provisions of this chapter and any rules and regulations promulgated thereunder shall be enforced by the fire marshal in accordance with the enforcement and penalty provisions of K.C.C. Title 23. (Ord. 5828 § 13, 1982: Ord. 3087 § 10, 1977).

**17.08.120 Severability.** Should any section, subsection, paragraph, sentence, clause or phrase of this chapter be declared unconstitutional or invalid for any reason, such decision shall not affect the validity of the remaining portions of this chapter. (Ord. 3087 § 11, 1977).

**17.08.130 Water purveyor authority.** Nothing in this chapter or rules and regulations adopted by the department in accordance with this chapter shall be construed to prohibit water purveyors from imposing more stringent requirements for the construction of water mains and fire hydrants. (Ord. 14915 § 124, 2004: Ord. 5828 § 11, 1982).

**17.08.140 Individual service connections.** No more than sixty feet of piping that connects the customer's plumbing system to the purveyor's water main or water meter shall be located in any public road right-of-way unless approved in accordance with K.C.C. chapter 14.28. (Ord. 14915 § 125, 2004: Ord. 5828 § 12, 1982).

**17.08.150 Effective date.** The effective date of this ordinance shall be ten days after its enactment, provided that existing standards for determination of minimum water flow requirements and for design and installation of fire hydrants shall remain in effect until rules and regulations pursuant to Sections 17.08.060 and 17.08.070 have become effective. (Ord. 5828 § 14, 1982).

**17.08.160 Appeals.** The King County fire prevention advisory and appeals board shall have the authority to hear appeals and make recommendations to the fire marshal from the requirements of this chapter. The criteria for board recommendations shall be the same as set forth in K.C.C. 17.08.090. (Ord. 7080 § 2, 1985).